

1 IN THE UNITED STATES DISTRICT COURT  
 2 FOR THE NORTHERN DISTRICT OF OKLAHOMA

3 STATE OF OKLAHOMA, ex rel,  
 4 W.A. DREW EDMONDSON, in his  
 capacity as ATTORNEY GENERAL  
 5 OF THE STATE OF OKLAHOMA,  
 et al.

6 Plaintiffs,

7 V.

8 TYSON FOODS, INC., et al.,

9 Defendants.

No. 05-CV-329-GKF-SAJ

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13 REPORTER'S TRANSCRIPT OF PROCEEDINGS

14 FEBRUARY 21, 2008

15 PRELIMINARY INJUNCTION HEARING

16 VOLUME III

17  
18 BEFORE THE HONORABLE GREGORY K. FRIZZELL, Judge

19  
20 APPEARANCES:

21 For the Plaintiffs: Mr. Drew Edmondson  
 Attorney General  
 22 Mr. Robert Nance  
 Mr. Daniel Lennington  
 23 Ms. Kelly Hunter Burch  
 Mr. Trevor Hammons  
 24 Assistant Attorneys General  
 313 N.E. 21st Street  
 25 Oklahoma City, Oklahoma 73105

Glen R. Dorrough  
 UNITED STATES COURT REPORTER

EXHIBIT

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VALERIE J. HARWOOD

Called as a witness on behalf of the plaintiffs, being first  
duly sworn, testified as follows:

THE COURT: State your full name for the record,  
please.

THE WITNESS: Valerie J. Harwood, PhD.

THE COURT: Thank you. Mr. Page, you my inquire.

MR. PAGE: Good morning, Dr. Harwood.

DIRECT EXAMINATION

BY MR. PAGE:

Q. Good morning, Dr. Harwood.

A. Good morning.

Q. Would you please tell the Court where you are employed?

A. Yes, University of South Florida, department of biology.

Q. And what do you do at the University of South Florida?

A. I'm a tenured associate professor. I have a research  
laboratory that includes seven PhD students and a master's  
student and two technicians. And the research that I conduct  
in that laboratory pertains to microbiological water quality  
and microbial source tracking and other aspects of  
microbiological water quality.

Q. How do you divide your time amongst your various  
responsibilities at the university?

A. My appointment is 55 percent teaching, 40 percent research  
and 5 percent service. I generally teach one undergraduate or

1 consider high risk. And for example, poultry feces contain --  
2 are known to very frequently contain Salmonella and  
3 Campylobacter. These are so-called zoonotic pathogens which  
4 means that they're inhabitants of the animal gastrointestinal  
5 tract but they cause disease in humans. And in fact,  
6 Campylobacteriosis and Salmonellosis are among the most  
7 prevalent of both waterborne and foodborne diseases.

8 Q. Both Campylobacter and Salmonella, are they both present  
9 in poultry waste?

10 A. Yes, they are.

11 Q. What about E. coli, is that also a zoonotic bacteria?

12 A. Well, the pathogenic forms of E. coli are, such as E. coli  
13 0157:H7R, yes, zoonotic forms as well.

14 Q. I'd like now to draw your attention to State's Exhibit  
15 437. Dr. Harwood, could you identify this exhibit for the  
16 Court, please?

17 A. Yes, this exhibit is a graph that was prepared from data  
18 that was collected in the IRW from 2005 to 2007. And it shows  
19 the relationship between E. coli concentrations on the vertical  
20 axis and fecal coliform concentrations on the horizontal axis.  
21 And what this graph shows is that the relationship between fecal  
22 coliforms and E. coli in the vast majority of the IRW samples  
23 is nearly equivalent and very linear with a slope of about one.  
24 And so these are highly correlated. And with this sort of  
25 information then, we can feel comfortable about applying the